

NOTES ON THE SYNONYMY, NYMPHS AND DISTRIBUTION OF *HETEROPSYLLA TEXANA* CRAWFORD
(Homoptera, Psyllidae)

BY D. D. JENSEN

Hawaii Agricultural Experiment Station, University of Hawaii

SYNONYMY

Van Duzee (1923) described as *Aphalara mera* a species of psyllid which had been collected in Lower California by the 1921 Expedition of the California Academy of Sciences to the Gulf of California. Examination by the writer of specimens from this series, in the collection of the California Academy of Sciences, has revealed that the species involved is *Heteropsylla texana* Crawford. This distinctive species, which is the genotype of *Heteropsylla*, was described by Crawford (1914) from numerous adults taken on eight different plant species in Texas, Arizona, Colorado and Kansas. The specimens collected in Lower California by Van Duzee show no differences in structure which would permit their separation from *H. texana*.

Caldwell (1941) correctly inferred from Van Duzee's description of *Aphalara mera* that the species could not be referred to *Aphalara* because of the conspicuous pterostigma. Since he had not had the opportunity of seeing Van Duzee's specimens, he placed *mera* tentatively in the genus *Paurocephala* which is closely related to *Heteropsylla*.

On the basis of the facts discussed above, the names *Aphalara mera* Van Duzee and *Paurocephala mera* (Van Duzee) must be considered synonyms of *Heteropsylla texana* Crawford.

NYMPHS

Except for a record by Klyver (1931) of two nymphs taken on *Prosopis glandulosa* (= *P. chilensis*), the literature contains no information on the immature stages of *texana*. Collections and observations made by the writer now permit the following description of the nymph and of its feeding site on the host plant.

The body outline of *texana* nymphs is of the psylline type as defined by Ferris (1925). In this group the front wing pads

project prominently from the contour of the body and are not produced cephalad at the humeral angle. The last instar nymphs are 2 mm. in length, naked, greenish to greenish-yellow in general color. The antennae are long, reaching to the apex of the wing pads, brown to black apically and on the distal portion of each segment except the basal two. The dorsum is predominantly membranous with the posterior portion of the abdomen, the wing pads, and the head, except the median region, sclerotized. In outline the abdomen is distinctive, being truncate apically and sharply notched laterally at the base of the two dagger-like setae produced on each side from the margin of the sclerotic area. Four similar setae extend caudad from the truncate margin, one from each postero-lateral angle and one on each side of the median line midway to the postero-lateral angle. A second type of setae, wedge-shaped and apically rounded, occurs on the body margin as follows: three on each side of the proximal two-thirds of the abdomen, one on the apical margin of each wing pad, one on each side of the prothorax, and four on the cephalic margin between the antennae. The circum-anal ring encompasses most of the apex of the abdomen and is composed of a row of slit-like pores.

The nymphs usually occur on the young tender growth where they feed on the expanding leaves.

DISTRIBUTION

Klyver (1931; 1932) extended the known distribution range of *texana* to Nevada, Utah and New Mexico.

NEW RECORDS

Adults of *texana*, collected by Van Duzee at Guayamas, Sonora, Mexico, April 9, 1921, occur in the series labelled *Aphalara mera* in the collection of the California Academy of Sciences. The Sonora record, however, was not published with Van Duzee's (1923) record from Lower California.

The following new collection records have been made by the writer.* CALIFORNIA. The species is herewith recorded from California for the first time. All California collections were

* The opportunity of making some of the collections listed was afforded by the United States Bureau of Entomology and Plant Quarantine during the writer's service in the Division of Fruit Insect Investigations.

made on mesquite, *Prosopis chilensis* (Molina) Stuntz (= *P. juliflora* (Swartz) DC; *P. glandulosa* Torr.; *P. odorata* Torr. and Frem; *P. velutina* Wooton). Riverside County: Nymphs and adults: Indio, April 7, 1940, May 15, 1941; Whitewater, May 15, 1941; San Timoteo Canyon, July 8, 1941, and June, 1942. Adults only: Palm Springs, February 5, 1940, November 28, 1940; Indio, January 17, 1941. San Bernardino County: Nymphs and Adults: Twenty-nine Palms, April 6, 1941. Adults only: Barstow, June 1, 1941. NEVADA. Adults only from *Prosopis* sp., Las Vegas, June 1, 1941. UTAH. Adults only from *Prosopis* sp., Leeds, June 17, 1941.

It is probable that *Prosopis chilensis* (Molina) Stuntz is the principal host, and possibly the only one, upon which *texana* completes its entire life cycle. Other plants may serve as temporary hosts for the adults. The indigenous range of *Prosopis chilensis* includes southwestern United States, as far east as Louisiana, Lower California, Mexico, Central America, Chile, and the West Indies. The present known range of *texana* includes all of the southwestern states except Louisiana, Lower California and Sonora, Mexico.

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